

**ADDENDUM NO. 2  
TO  
CONTRACT DOCUMENTS  
FOR  
653 COOK AVENUE**

**DATE:** November 1, 2013

**OWNER:** The Housing and Redevelopment Authority of Saint Paul, Minnesota  
25 West Fourth Street, Saint Paul, MN 55102, Suite 1100  
Marty McCarthy – Project Manager  
(651) 266- 6552  
Marty.McCarthy@ci.stpaul.mn.us

**CONSTRUCTION**

**MANAGER:** Neighborhood Development Alliance, Inc. (NeDA)  
481 Wabasha Street  
Saint Paul, MN 55107  
Gail Merriam, Project Construction Manager  
651.292.0131  
gmerriam@nedahome.org

**SCOPE**

**WRITER:** Lunning Wende Associates  
275 East Fourth Street, Suite 620  
Saint Paul, MN 55101  
Scott Wende  
651.221.0915  
scott@lunningwende.com

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The additions, omissions, corrections and clarifications contained in this Addendum shall be included as a part of the Contract Documents as provided for under the General Conditions of the Contract.

This Addendum is a Contract Document and may apply to any or all contracts and sub-contracts. Unless otherwise specified herein, all work required by this Addendum shall be in complete accord with the Contract Documents and subsequent Addendum thereto.

**Prior Approvals:** The below listed manufacturers of materials, equipment or systems are acceptable in name only and shall be subject to final approval of the specific product as to satisfying all requirements of the contract documents. The cost of any changes in the work of all trades as a result of substitutions shall be borne by the contractor making the substitutions.

This Addendum shall become part of the bid. The bidder shall insert the Addendum number in the space where indicated on the Bid Form. Failure to comply may result in the bid being rejected.

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## ARCHITECTURAL, STRUCTURAL AND SITE SPECIFICATION REVISIONS:

This document has been assembled to aid Contractors in preparing their bids for this Project. The present condition of the property is one of mid-construction. Assessment has been taken of the work completed and recommendations are made as to; acceptance of the Work, unfinished Work, rejection of the Work, and Work to be completed. Photographs have been included, in each specification section where appropriate, to provide additional clarification.

## BIDDING AND CONTRACT REQUIREMENTS

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Bids Issued:	November 14, 2013
Mandatory Pre-Bid Site Tour:	Thursday, November 21, 2013; 11:00 am - 12:30 pm
Bid Due Date on or Before:	Friday, December 5, 2013 at 2:00 pm
Bid Delivery Location:	The offices of the Housing and Redevelopment Authority of Saint Paul, MN Address: 25 West Fourth Street, Saint Paul, MN, Suite 1100
Public Bid Opening and Location:	Friday, December 6, 2013 at 2:05 pm, Same address as above.

## FACILITY CONSTRUCTION

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### Facility Construction Specification Revisions:

**REVIEW:** All Specification Sections have been reviewed for work progress.  
Neighborhood Energy Connection Mid-construction inspection report dated October 3, 2013

### Facility Construction Drawings Included:

**None**

### Facility Construction Drawing Revisions:

**ADD:** Stair revision drawings for the First to Second Floor stairway wall.  
Kitchen / Old Porch floor insulation drawing.  
Structural information has been added in a memo dated September 18, 2013.

**Specification Section 02 8200 - Asbestos Remediation**

This entire section should be reviewed for compliance

**Specification Section 02 8313 - Lead Hazard Control Activities**

This entire section should be reviewed for compliance

**Specification Section 03 0100 Maintenance of Concrete**

As called for in the current specifications:

**3.03 LOCATIONS**

- A. Basement Floor
- B. Exterior foundation wall

**Work to Date:**

**This work has not been completed**



Condition of Basement Floor

**Specification Section 03 0100 Maintenance of Concrete**



Southwest corner foundation cracked. See Sheet S101 for structural repair notes.



**Specification Section 03 0100 Maintenance of Concrete**



Missing foundation wall at northwest corner.

**Specification Section 03 3000 Cast-in-Place Concrete**

As called for in the current specifications:

3.07 LOCATIONS

- A. Miscellaneous repair to Basement Floor
- B. Porch footings

**ADD**

- C. Exterior foundation wall

**Work to Date:**

This work has not been completed:



Pour new Basement floor where dirt floor exists

**Specification Section 03 3000 Cast-in-Place Concrete**



Footings for new porch



Missing foundation wall at northwest corner.



**Specification Section 04 0100 - Maintenance of Masonry**

As called for in the current specifications:

2.04 LOCATIONS

- A. Perimeter interior/exterior foundation wall

**Work to Date:**

**This work has not been completed:**



Typical Basement conditions

**Specification Section 04 2300 - Glass Unit Masonry**

As called for in the current specifications:

3.02 LOCATIONS

A. Basement windows

**Work to Date:**

This work has not been completed:



Existing Basement windows

**Specification Section 05 7300 - Decorative Metal Railings**

As called for in the current specifications:

2.03 LOCATIONS

- A. Front steps; anchored to concrete steps

**Work to Date:**

- A. Front steps; anchored to concrete steps - **work not started**

**Specification Section 06 1000 - Rough Carpentry**

As called for in the current specifications:

**3.04 LOCATIONS**

- A. Basement
- B. Bathrooms - First and Second Floors
- C. First Floor - opening and closing of interior walls
- D. Garage
- E. New window openings on First and Second Floor
- F. Front Porch
- G. Closing existing door opening

**Work to Date:**

This work has not been completed:

- A. Basement - **structural shoring and finish stair**
- B. Bathrooms - First and Second Floors - **mostly completed**
- C. First Floor - opening and closing of interior walls - **mostly completed**
- D. Garage - **did not install window as called for**
- E. New window openings on First and Second Floor - **mostly completed**
- F. Front Porch - **existing roof to be removed, new porch to be constructed**
- G. Closing existing door opening - **completed**

**ADD****H. Dining A:**

1. Tear up a section of the plywood floor and inspect completed work; framing, insulation, footing depth, etc.
2. Complete framing of rear entry closet
3. Repair and finish of ceiling and walls
4. Install doors and windows in north wall

**Specification Section 06 1000 - Rough Carpentry**



Existing Front Porch



Dining A - existing ceiling and rear entry closet framing



**Specification Section 06 1000 - Rough Carpentry**



Dining A - existing walls, ceiling and north wall

**Specification Section 06 2000 - Finish Carpentry**

As called for in the current specifications:

**3.02 LOCATIONS**

- A. Front Porch
- B. Refinish of Living Room stained glass window
- C. Refinish First to Second Floor stair trim
- D. Kitchen trim
- E. First Floor remodel as shown on drawings

**Work to Date:**

**This work has not been completed:**

- A. Front Porch
- B. Refinish of Living Room stained glass window
- C. Refinish First to Second Floor stair trim - **cancelled, see below**
- D. Kitchen trim - **verify**
- E. First Floor remodel as shown on drawings

**ADD**

- E. A revised set of drawings dated October 24, 2012 included; relocating the front door, constructing new stairs to the second floor, re-configuring the Second Floor to provide a third Bedroom, and a revision to the Second Floor Bathroom.
- G. Dining A:
  - Finish carpentry associated with;
  - 1. Tear up a section of the plywood floor and inspect completed work; framing, insulation, footing depth, etc.
  - 2. Complete framing of rear entry closet
  - 3. Repair and finish of ceiling and walls
  - 4. Install doors and windows in north wall
- H. Throughout:
  - 1. Install base shoe at floor / wall baseboard gap

See relevant photos in **Specification Section 06 1000 Rough Carpentry**

**Specification Section 07 2119 - Foamed-In-Place Insulation**

As called for in the current specifications:

**3.02 LOCATIONS**

- A. Insulate and air seal to rim joist cavities to an r-value of R-19
- B. See NEC Energy Audit Recommendations in Section 01 9200

**Work to Date:**

This work needs to be reviewed and verified

**Specification Section 07 2126 - Blown Insulation**

As called for in the current specifications:

**3.02 LOCATIONS**

- A. ATTIC: Total r-value: R-50 according to NEC requirements.
  - 1. Dense pack below attic floor and blow above floor to meet R-50 requirement.
  - 2. Insulate and weatherstrip attic hatch: Access hatch door shall be insulated to R-50 and insulation dam constructed around opening. Opening shall be weather-stripped to provide an air tight seal.
- B. WALLS: Where walls are unopened, externally dense pack insulation to R-19 if possible or 3.5 lbs. per cubic foot per cavity.
- C. There are Attic areas will need to be accessed from the roof
- D. See additional locations such as knee walls, slants, etc. as mentioned in the NEC Specifications
- E. See NEC Energy Audit Recommendations is Section 01 9200

**Work to Date:**

This work needs to be reviewed and verified

**Specification Section 07 2500 - Weather Barriers**

As called for in the current specifications:

3.02 LOCATIONS

- A. Exterior of the House, under siding
- B. Around new windows
- B. See NEC Energy Audit Recommendations in Section 01 9200

**Work to Date:**

This work needs to be reviewed and verified

**Specification Section 07 2700 - Air Barrier System (Sealing of Bypasses)**

As called for in the current specifications:

3.02 LOCATIONS

- A. Exterior and Interior throughout, including attic
- B. See NEC Energy Audit Recommendations in Section 01 9200

**Work to Date:**

This work needs to be reviewed and verified

### Specification Section 07 3113 - Asphalt Shingles

As called for in the current specifications:

#### 3.02 LOCATIONS

- A. House
- B. New Garage

#### Work to Date:

This work needs to be reviewed and verified

- A. House - **evidence of rotted wood at roof edge, no drip edge, roof vent is missing, and no ventilated soffits**
- B. New Garage - **verify drip edge**



No drip edge



**Specification Section 07 3113 - Asphalt Shingles**



No vents



Rotted wood

### Specification Section 07 4646 - Fiber Cement Siding

As called for in the current specifications:

#### 3.02 LOCATIONS

- A. House
- B. New Garage

#### Work to Date:

This work needs to be reviewed and verified

- A. House - **perimeter detailing at foundation wall to be reviewed, see note #3 on sheet A201 for flashing detail at foundation wall and concrete slab on east wall, repair/replace missing siding in various places**
- B. New Garage - **wavy siding on west wall, missing window in south wall**



Typical siding detail at foundation wall

**Specification Section 07 4646 - Fiber Cement Siding**



**Siding at concrete slab - east elevation**



Missing siding

## Specification Section 07 6200 - Sheet Metal Flashing and Trim

As called for in the current specifications:

### 3.02 LOCATIONS

- A. Exterior of the House - soffit, trim, fascia, doors and windows as needed
- B. Garage - soffit, fascia, doors and windows as needed

### Work to Date:

This work needs to be reviewed and verified

- A. House - **missing soffits, inspect flashing at foundation wall, verify quality of work**
- B. New Garage - **verify existing work**



Bottom of trim is left open



**Specification Section 07 7123 - Manufactured Gutters and Downspouts**

As called for in the current specifications:

**3.02 LOCATIONS**

- A. Downspouts shall divert the entire water load in the direction of the rain garden according to the Landscape Plan
- B. Refer to drawings for locations

**Work to Date:**

Gutters and downspouts have not been installed.



Typical roof eave



**Specification Section 08 1100 - Exterior Insulated Metal Doors and Frames**

As called for in the current specifications:

3.05 LOCATIONS

- A. Front Entrance
- B. Rear Entrance
- C. Garage service door is part of the pre-purchase of the Garage

**Work to Date:**

- A. Front Entrance - **completed**
- B. Rear Entrance - **not installed**
- C. Garage service door is part of the pre-purchase of the Garage -**completed**



Rear entry doors not installed

**Specification Section 08 1429 - Wood Doors**

As called for in the current specifications:

**3.03 LOCATIONS**

- A. First Floor
  - a. Family Room Closet
  - b. Bathroom
  - c. Basement Stair
  - d. Rear Entry Closet
- B. Second Floor
  - a. Bathroom
  - b. South Bedroom Door
  - c. South Bedroom Closet
  - d. North Bedroom
  - e. North Bedroom Closet

**Work to Date:**

- A. First Floor
  - a. Family Room Closet - **installed**
  - b. Bathroom - **installed**
  - c. Basement Stair - **installed**
  - d. Rear Entry Closet - **not installed**
- B. Second Floor
  - a. Bathroom - **installed**
  - b. South Bedroom - **not installed**
  - c. South Bedroom Closet - **installed**
  - d. North Bedroom - **installed**
  - e. North Bedroom Closet - **not installed**

- ADD:** Second Floor
- f. West Bedroom - **not installed**
  - g. West Bedroom Closet - **installed**

**Specification Section 08 3323 - Overhead Garage Doors**

As called for in the current specifications:

2.03 LOCATIONS

- A. New Garage

**Work to Date:**

- A. New Garage - work completed - garage is full of construction debris

**Specification Section 08 5200 - Wood Windows**

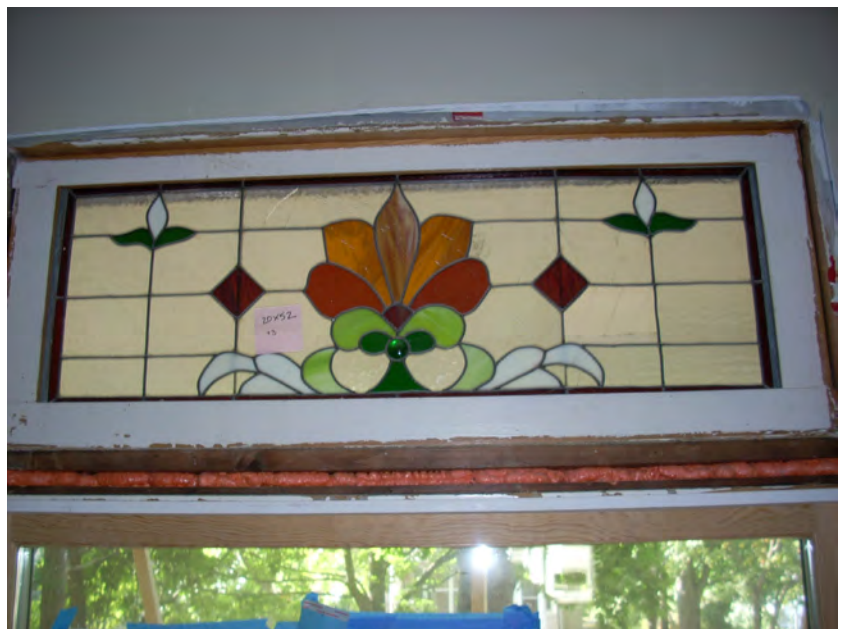
As called for in the current specifications:

**3.02 LOCATIONS**

A. South Living Room stained glass window

**Work to Date:**

Repair not completed



**Specification Section 08 5313 - Vinyl Windows**

As called for in the current specifications:

**3.04 LOCATIONS****A. REPLACEMENT WINDOWS****1. DOUBLE HUNG:**

- a. Dining A – west wall
- b. Family Room – east wall
- c. Kitchen – west wall
- d. First Floor Bathroom – east wall
- e. Second Floor Bathroom – east wall
- d. Second Floor South Bedroom – south wall
- e. Second Floor Sitting Room – west wall
- f. Second Floor North Bedroom – east and north walls

**2. PICTURE WINDOW**

- a. Living Room – south wall

**B. NEW WINDOWS****1. DOUBLE HUNG**

- a. Kitchen – north wall
- b. Living Room – west wall
- c. Second Floor North Bedroom – north wall

**2. OTHER**

- a. Living Room – storm window for stained glass
- b. Front Entry - Transom

**Work to Date:****A. REPLACEMENT WINDOWS****1. DOUBLE HUNG:**

- a. Dining B – west wall - **installed**
- b. Family Room – east wall - **installed, missing screen**
- c. Kitchen – west wall - **installed**
- d. First Floor Bathroom – east wall - **installed**
- e. Second Floor Bathroom – east wall - **eliminated, drawing revision set October 24, 2012**
- d. Second Floor South Bedroom – south wall - **installed, missing screen**
- e. Second Floor Sitting Room – west wall - **installed**
- f. Second Floor North Bedroom – east and north walls - **installed, missing screens**



**Specification Section 08 5313 - Vinyl Windows**

- 2. PICTURE WINDOW
  - a. Living Room – south wall - **installed**
- B. NEW WINDOWS
  - 1. DOUBLE HUNG
    - a. Kitchen – north wall - **not installed**
    - b. Living Room – west wall - **installed**
    - c. Second Floor North Bedroom – north wall - **installed**
  - 2. OTHER
    - a. Living Room – storm window for stained glass - **installed**
    - b. Front Entry - Transom - **eliminated, drawing revision set October 24, 2012**



North wall Kitchen windows not installed

**Specification Section 08 6250 - Solar Tube**

**Location:**

Second Floor Bathroom

**Work to Date:**

Unit has been installed. Review installation, flashing, mounting, sealing and surrounding insulation. Repair/replace as necessary.

**Specification Section 09 0120 - Repair of Plaster and Gypsum Board Surfaces**

As called for in the current specifications:

**3.02 LOCATIONS**

- A. Throughout, First and Second Floor as needed following improvements.  
Refer to Drawings

**Work to Date:**

Most of the work is completed with the exception of the Dining A area: walls, ceiling and rear entry closet. There is also minor modification to the stairway wall to the Second Floor.



Dining A

**Specification Section 09 0160 - Hardwood Floor Restoration**

As called for in the current specifications:

**3.02 LOCATIONS**

- A. First Floor:
  - 1. Throughout
  - 2. Except Bathroom
  - 3. Stair to Second Floor
- B. Second Floor
  - 1. Throughout
  - 2. Except Bathroom

**Work to Date:**

Floors are sanded but not finished. This work should be reviewed and suggestions may on how to proceed. Miscellaneous repairs are needed. **A floor material needs to be picked for Dining A.** Stair treads and risers need to be installed for both the Basement stairs and the stairs to the second floor. **Carpet has be put down in the north Bedroom, on second floor. This floor should be looked at for possible restoration.**



First Floor - Living / Dining Room

**Specification Section 09 0160 - Hardwood Floor Restoration**



Repair on First Floor, Similar on Second Floor



South Bedroom, Second Floor



### Specification Section 09 2116 - Gypsum Board Installation

As called for in the current specifications:

#### 3.03 LOCATIONS

- A. As required by suggested demolition, including but not limited to:
  - 1. First Floor Kitchen
  - 2. Wall patch on Second Floor

#### Work to Date:

Most of the work is completed with the exception of the Dining A area: walls, ceiling and rear entry closet. There is also minor modification to the stairway wall to the Second Floor.



Dining A

**Specification Section 09 3000 - Tiling**

As called for in the current specifications:

**3.06 LOCATIONS**

- A. Bathtub Tile Surround
  - 1. Second Floor Bath
- B. Bathroom Tile Floor
  - 1. First Floor Bath
  - 2. Second Floor Bath
- C. Alternate #1 – Tile Kitchen floor if the wood floor cannot be restored

**Work to Date:**

- A. Bathtub Tile Surround
  - 1. Second Floor Bath - wall tile complete, finish detailing needed
- B. Bathroom Tile Floor
  - 1. First Floor Bath - floor tiling incomplete, grout and finishing
  - 2. Second Floor Bath - floor tile complete
- C. Alternate #1 – Tile Kitchen floor if the wood floor cannot be restored - floor material needs to be chosen for the area in Dining A



First Floor - floor tiling incomplete, grout and finishing

**Specification Section 09 3000 - Tiling**



Second Floor - floor tile complete



Second Floor - wall tile complete, finish detailing needed

**Specification Section 09 9000 - Painting and Coating**

As called for in the current specifications:

**3.03 LOCATIONS****A. Throughout**

1. Walls and Ceilings: Eggshell Sherwin Williams Low VOC
  - a. Wall Color: Wool Skein, SW 6148
  - b. Ceiling Color: Ceiling White
2. Interior Trim: Semi-gloss Sherwin Williams Low VOC
  - a. Trim Color: Extra White, SW 7006

**B. First and Second Floor Baths**

1. Walls and Ceilings: Semi-gloss Sherwin Williams Low VOC
  - a. Wall Color: Nacre, SW 6154
  - b. Ceiling Color: Ceiling White

**C. Basement:**

1. Floor
  - a. Color: Match concrete floor grey

**D. Exterior:**

1. Front Porch - Stain
  - a. Color: Yankee Barn, SW3505
2. House siding
  - a. Color: Stone Lion, SW7507
3. House trim
  - a. Color: Windfresh White, SW7628
4. Garage to match house

**Work to Date:****Review and verify****A. Throughout**

1. Walls and Ceilings: Eggshell Sherwin Williams Low VOC
  - a. Wall Color: Wool Skein, SW 6148
  - b. Ceiling Color: Ceiling White
2. Interior Trim: Semi-gloss Sherwin Williams Low VOC
  - a. Trim Color: Extra White, SW 7006

**Specification Section 09 9000 - Painting and Coating**

- B. First and Second Floor Baths
  - 1. Walls and Ceilings: Semi-gloss Sherwin Williams Low VOC
    - a. Wall Color: Nacre, SW 6154
    - b. Ceiling Color: Ceiling White
- C. Basement:
  - 1. Floor
    - a. Color: Match concrete floor grey
- D. Exterior:
  - 1. Front Porch - Stain
    - a. Color: Yankee Barn, SW3505
  - 2. House siding
    - a. Color: Stone Lion, SW7507
  - 3. House trim
    - a. Color: Windfresh White, SW7628
  - 4. Garage to match house



**Specification Section 10 5623 - Closet Storage Shelving**

As called for in the current specifications:

3.02 LOCATIONS

A. Closets Throughout

**Work to Date:**

No work has been done

**Specification Section 10 7446 - Window Wells**

As called for in the current specifications:

3.02 LOCATIONS

A. All basement windows that require a window well by code.

**Work to Date:**

No work has been done

**ADD:** East side window well to be 2" above established grade

**Specification Section 11 3100 - HRA Residential Appliances**

As called for in the current specifications:

2.02 LOCATIONS

- A. Basement
- B. Kitchen

**Work to Date:**

Remove and reinstall as needed.

**Specification Section 12 1110 - HRA Mail Box and House Numbers**

As called for in the current specifications:

3.02 LOCATIONS

- A. House numbers and mail box at Front Entrance
- B. House number at Garage Overhead Entrance

**Work to Date:**

Work not completed.

**Specification Section 12 1111 - Bathroom Furnishings**

As called for in the current specifications:

3.02 LOCATIONS

- A. First Floor Bathroom
- B. Second Floor Bathroom

**Work to Date:**

Partial installation.

- A. First Floor Bathroom - towel bars and toilet paper holder installed
- B. Second Floor Bathroom - towel bar installed

**Specification Section 12 3530 - Residential Casework**

As called for in the current specifications:

**3.02 LOCATIONS**

- A. Kitchen Cabinets & Counter Top; Kitchen
- B. Bathroom Cabinet & Counter Top; Second Floor Bathroom

**Work to Date:**

**Remove and reinstall as needed.**

- A. Kitchen Cabinets & Counter Top; Kitchen - **partial installation**
- B. Bathroom Cabinet & Counter Top; Second Floor Bathroom - **partial installation**



Kitchen cabinets



**Specification Section 12 3530 - Residential Casework**



Center island and pantry



Second Floor Bathroom cabinet

**Specification Section 22 3000 - Plumbing Equipment**

This entire section should be reviewed for compliance

**Specification Section 22 4000 - Plumbing Fixtures and Piping**

This entire section should be reviewed for compliance

**Specification Section 23 0000 - Residential Ventilation**

This entire section should be reviewed for compliance

**Specification Section 23 5400 - Forced Air Furnace and Ducts**

This entire section should be reviewed for compliance

**Specification Section 23 6213 - Forced Air AC**

This work has not been done.

**Specification Section 26 0001 - Power, Wiring and Devices**

This entire section should be reviewed for compliance

**Specification Section 26 5101 - HRA Lighting**

This entire section should be reviewed for compliance

**Specification Section 28 1600 - Intrusion Detection**

This work has been completed.



**Specification Section 31 2200 - Grading**

As called for in the current specifications:

2.03 LOCATIONS

A. See Landscape Plan

1. This plan does include a raingarden

**Work to Date:**

Grading is partially complete



Site grading for front sidewalk

**Specification Section 31 2200 - Grading**



Site grading at back yard



Site grading at Garage

### Specification Section 32 1313 - Concrete Paving

As called for in the current specifications:

#### 3.04 LOCATIONS

- A. See Landscape Plan
- B. Garage apron to alley
- C. Front entry sidewalk and steps
- D. Rear entry sidewalk

#### Work to Date:

- A. See Landscape Plan
- B. Garage apron to alley - **completed**
- C. Front entry sidewalk and steps - **partially laid out**
- D. Rear entry sidewalk - **not laid out**

**ADD: Modify front entry sidewalk and steps as per drawing revisions dated October 24, 2012**



Front entry sidewalk



**Specification Section 32 1313 - Concrete Paving**



Entry step framing



Rear entry sidewalk area

**Specification Section 32 1413 - Precast Concrete Unit Paving**

As called for in the current specifications:

**3.02 LOCATIONS**

- A. North of House, area at rear French doors

**Work to Date:**

- A. North of House, area at rear French doors - **work not started**



Area for precast concrete unit pavers

**Specification Section 32 3129 - Wood Fences and Gates**

As called for in the current specifications:

**3.02 LOCATIONS**

- A. North property line, around the back yard and at front retaining wall

**Work to Date:**

- A. North property line, around the back yard and at front retaining wall - **not installed**

**Note:** Locations shown on Sheet A001



Fence location at front retaining wall



**Specification Section 32 3223 - Segmental Retaining Walls**

As called for in the current specifications:

**3.02 LOCATIONS**

- A. Replace existing retaining wall in front yard at south property line

**Work to Date:**

- A. Replace existing retaining wall in front yard at south property line - **partially installed**

**ADD:** Additional retaining wall a back patio





**Specification Section 32 3223 - Segmental Retaining Walls**



Retaining wall location at patio

**Specification Section 32 9223 - Sodding**

As called for in the current specifications:

3.03 LOCATIONS

- A. See Landscape Plan
- B. Site Work, as needed. (no bare soil permitted)

**Work to Date:**

No work has been started

**Specification Section 32 9300 - Plants**

As called for in the current specifications:

3.04 LOCATIONS

- A. As indicated by Landscape Plan

**Work to Date:**

No work has been started

# HOME ENERGY AUDIT Infrared Report



Inspection Date: 10/3/13  
 Client Name: City of St Paul/ NeDA  
 Building Address: 653 Cook Ave E, St Paul  
 Thermographer: Terry Cagle-Kemp, 651-221-4462

An inspection, visual and infrared (with a blower door depressurizing the house) was conducted on October 3 to try to determine the quality of the insulation and air sealing work that was done at 655 Cook Ave E. The blower door test reading was 4545 CFM50. Visual inspection of the attic showed that the attic bypasses had not been sealed and that the attic needs to be insulated to R-50. The temperature difference between inside and outside (10° F) at the time of the inspection was not great enough to conclusively determine the quality of the wall insulation. However, as can be seen in the pictures, the back walls of the kitchen addition do need to be re-insulated. In addition there are issues with the foundation where repairs are needed to provide air sealing to the crawl spaces and to prevent additional wood rot.

## ABOUT INFARED IMAGES

The infrared (IR) images show what the surface temperatures of wall and ceiling areas are relative to surrounding areas. The darker shades represent colder areas and indicate framing and/or insulation voids or cold air coming in from outside. Following are infrared images next to standard digital photos of the same areas. Darker shades indicate cooler surfaces while lighter shades indicate warmer surfaces.

DIGITAL PHOTOS and INFARED IMAGES

COMMENTS



These three images indicate that attic bypass sealing was not done. The original audit indicated that the attic was at R-26. Because the insulation has been moved around so much, I was unable to tell if any additional insulation was added, but additional insulation is clearly needed to bring the whole attic up to R-50.



## HOME ENERGY AUDIT Infrared Report

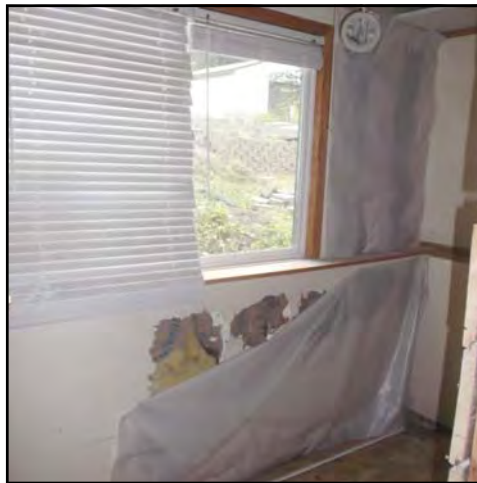
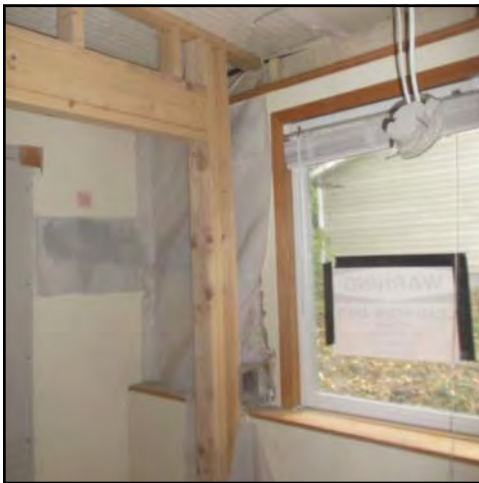


DIGITAL PHOTOS and INFARED IMAGES

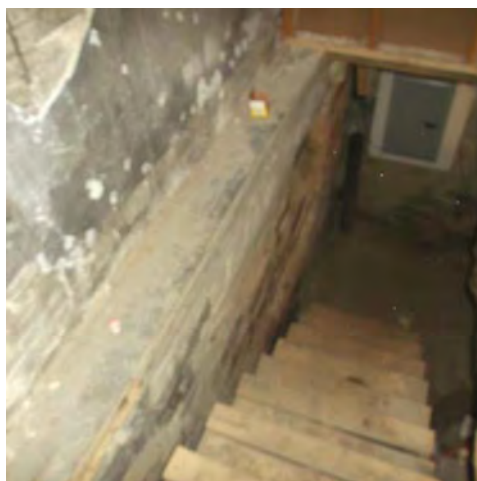
COMMENTS



These two images are of the sun tube that was installed in the second floor bathroom. The perimeter of the sun tube at the attic floor needs to be sealed. Currently, there is no cover to the sun tube and birds could easily get into the house.



Since the drywall is damaged in the back walls of the addition, it is recommended that the damaged portions be removed and that the wall be re-insulated with new fiberglass batts.



Left image- Visual inspection of the ceiling cavity of the back addition through a small hole showed that it is un-insulated. Prior to insulating the ceiling to capacity with cellulose, the edges of the ceiling should be sealed with caulk.

Right image- The blower door test indicated the top of the foundation along the basement stairwell was leaky and needs to be sealed



## HOME ENERGY AUDIT Infrared Report



DIGITAL PHOTOS and INFARED IMAGES

COMMENTS



The first image shows the very shallow crawl space underneath part of the back addition, about 12 feet deep by 8 feet wide. The second image shows the shallowness of the remainder of the back crawl space. The insulation contractors appeared to have sealed and insulated the portions of the rim joist that they could get access to.



Exterior images of the front of the house indicate openings into an inaccessible crawl space. This corner needs to be repaired and air sealed.



These two images show the only areas of the crawl space in the back of the house that were not accessible by the insulation contractor. Otherwise, the rest of the accessible areas of the rim joist in the basement were insulated.

## HOME ENERGY AUDIT Infrared Report



DIGITAL PHOTOS and INFARED IMAGES

COMMENTS

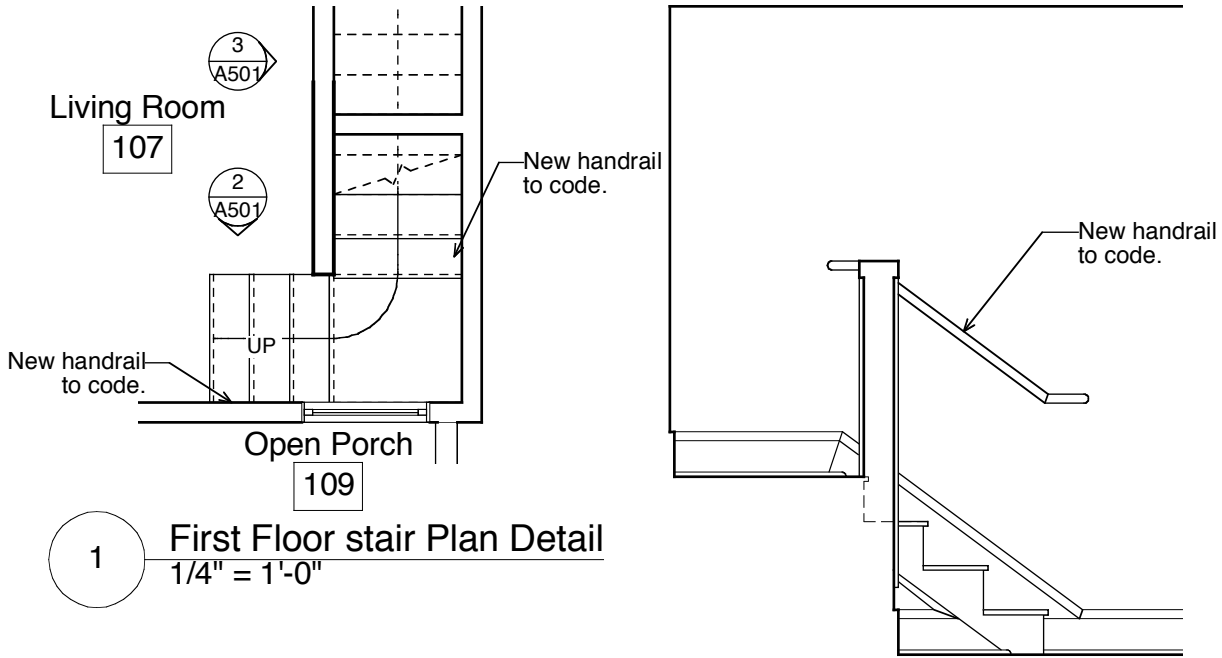


The small temperature differential between inside prevented conclusive evidence of wall insulation. However, inspection around outlets and these two images (basement stairwell and under the stairs to second floor) indicated that the walls are insulated.



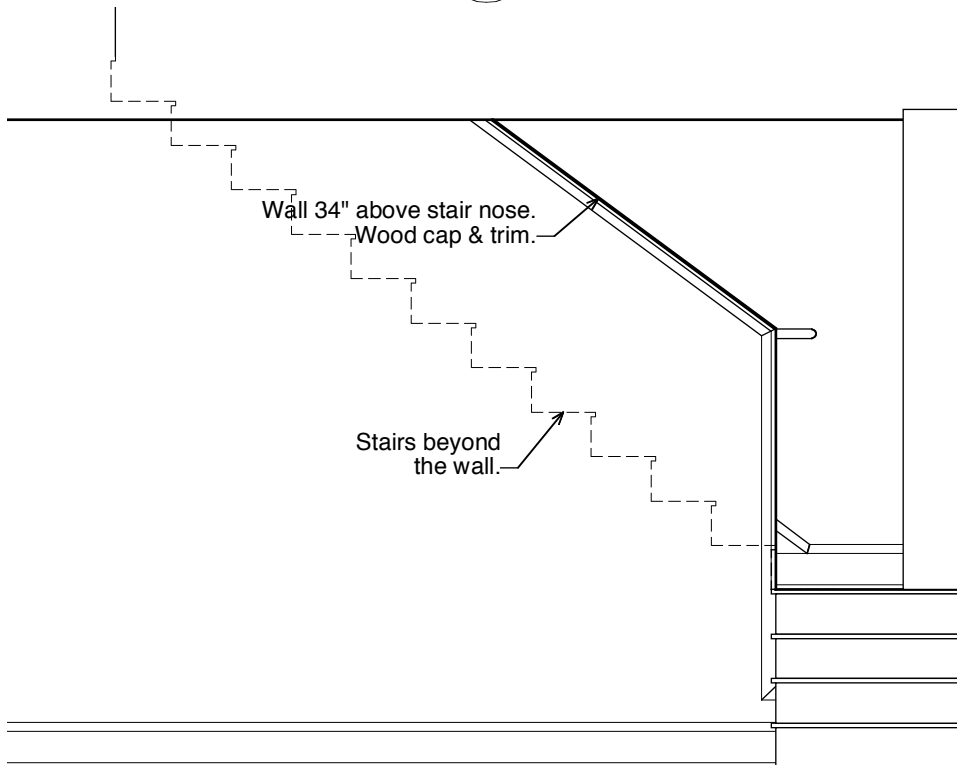
These images of the east side of the house towards the back show that there is some evidence of rotting wood that should be repaired. The bottom right image is of the back of the house. The soil should be removed and the foundation should be inspected for rot.





1 First Floor stair Plan Detail  
1/4" = 1'-0"

2 Stair Elevation  
1/4" = 1'-0"



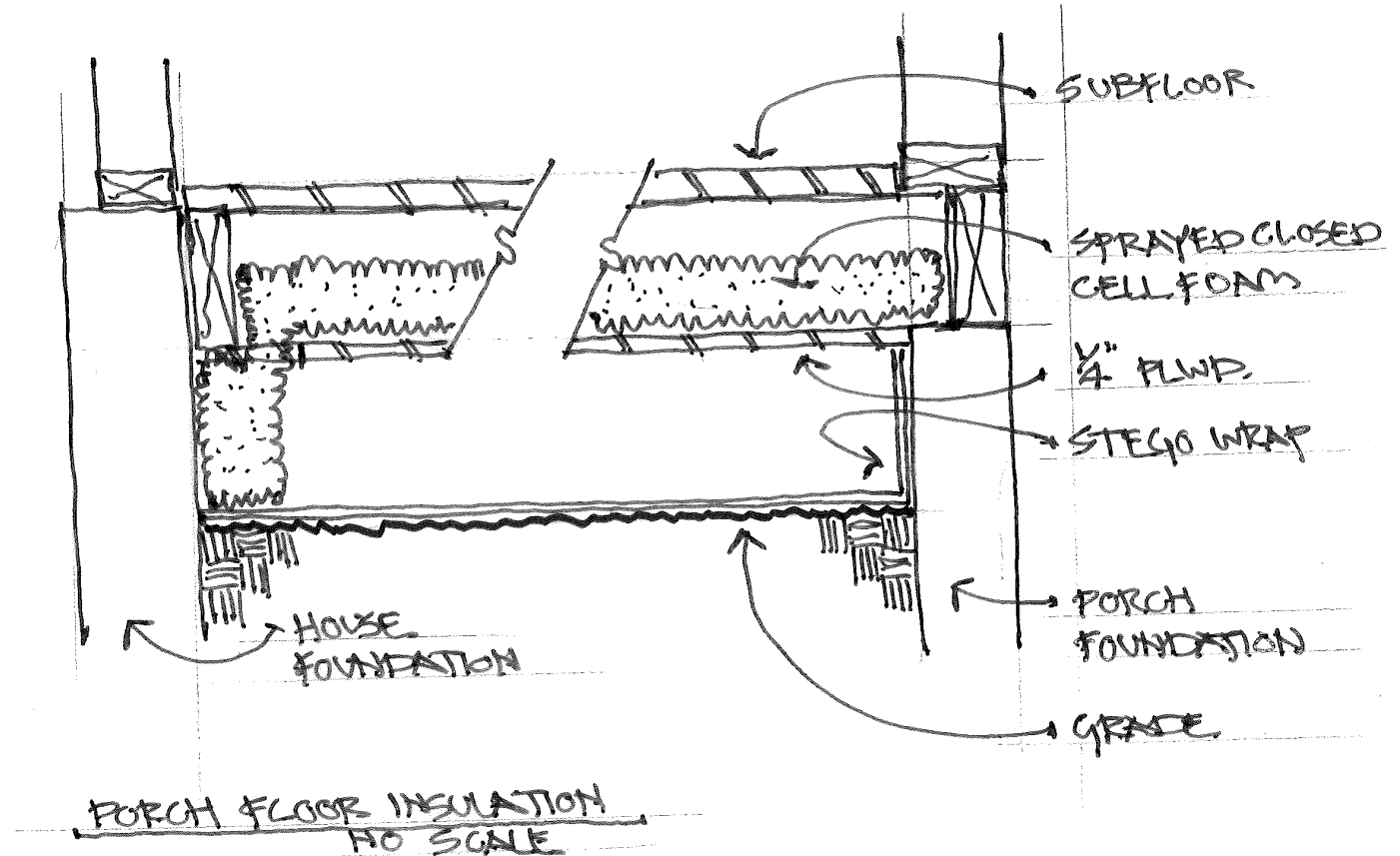
3 Living/Stair Elevation  
1/4" = 1'-0"


ARCHITECT	Lunning Wende Associates, Inc. 275 4th Street East, Suite 620 Saint Paul, MN 55101 P 651.221.0915 F 651.222.6259	
	I HEREBY CERTIFY THAT THESE DRAWINGS WERE PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ARCHITECT UNDER THE LAWS OF THE STATE OF MINNESOTA. SIGNATURE: <i>Scott Wende</i> NAME: SCOTT WENDE LICENSE NUMBER: 18071 Date: October 2, 2013	
DRAWINGS	Revision Interior Elevation Stair Wall Elevations	
	PROJECT 653 Cook	
ISSUE TYPE	Addendum 2	
	DETAIL	-/-
SHEET	DATE RECEIVED	-
	DATE RESPONDED	-
Stair Revision		



# Insulation under rear Kitchen / Old Porch

1. Provide and install 16 mil Stego Wrap vapor barrier on grade and along porch foundation wall.
2. 1/4" plywood nail to bottom of floor joists - this to hold spray foam in place.
3. Spray closed cell foam along house foundation wall and continuous in between floor joists - this will also provide a vapor barrier for the floor.
4. Reinstall subfloor.



<p>ARCHITECT</p>  <p>Lunning Wende Associates, Inc. 275 4th Street East, Suite 620 Saint Paul, MN 55101 P 651.221.0915 F 651.222.6259</p>	<p>DRAWINGS</p> <p>Kitchen / Porch floor insulation</p>	<p>DATE</p> <p>Addendum 2</p>
	<p>PROJECT</p> <p>653 Cook</p>	<p>SCALE</p>
		<p>SHEET</p>



**Date:** October 4, 2013

**To:** Lunning/Wende Associates, Inc.  
275 East Fourth St.  
Suite 620  
St. Paul, MN 55101

**Attn:** Scott Wende

**From:** Eric Bunkers

**Project:** Residence  
653 E. Cook Ave.  
St. Paul, MN

**Proj. No:** 13223

**Subject:** Addendum #2, Structural Items to Complete

Dear Scott:

As requested, we met you at the above referenced project to visually observe the existing conditions and determine which structural items are remaining at the project. Our observations were visual only and we did not remove any finishes. Our observations are intended to indicate which structural items were not completed by the contractor in accordance with our structural drawings. Here is a list of our findings:

1. We recommend the stack block retaining walls on the property be rebuilt with the proper tie-back system per the manufacturer's recommendations.
2. Installation of front porch framing and foundations are incomplete.
3. The front SW corner of the house foundation tuckpointing is incomplete. The new underpinned concrete pad footing has not been installed at the SW corner.
4. There is missing masonry foundation near the SE corner of the front porch where daylight can be seen from the basement. Clean and patch the hole with masonry or concrete as required. Remove exterior insulation along the front foundation wall to observe any additional foundation issues. Reinstall rigid insulation at front foundation wall.
5. Add 6x6 basement column under timber beam below kitchen area under the trimmer studs above per plan. Install precast 12"x12" plinth block at post base onto sound basement slab.
6. Add 6"cmu buttress hidden under extended basement stairs to help hold back lateral soil pressures per plan. Backfill behind stairs with sand and pour shelf slab per plan.
7. Install 2 – 2x10 treated sill plate to foundation wall full length of stair well with 1/2"x12" anchor bolts at 24" oc to grouted cells. Attach both ends to framing with 5- 1/4"x6" GRK screws.
8. Install 11 7/8" LVL ledger over top of joist ends above basement stairs to studs with 3 – 1/4" x 4" GRK screws at 16" oc to each stud. Hang joists to ledger with 2x4 vertical blocks nailed to ledger and joists with 4 – 16d nails each end. Rest ledger on existing joist next to stairs and double up joist with 2x10 glued and nailed. Bear on post on foundation at masonry buttress wall near stairs on treated plate.
9. Block soft subfloor in kitchen near heat register.

10. Bolt basement stair base to concrete slab.
11. Add 2x4 king stud at the dining room opening where adjacent studs stop short.
12. Re-grade north yard and install gutters with long downspout extensions to help minimize water infiltration into the foundation.
13. Remove subfloor at NW house corner and repair NW foundation corner per plan.
14. 2<sup>nd</sup> floor joists above the front room are assumed to be 2x8's at 16" oc that span east/west. Install 2 – 7 1/4" LVL flush header above widened front room stair opening and hanger joists. Bear south end on 2 – 2x8 header and bear north end on 2 – 2x4 post onto 16"x16"x8" footing in crawlspace with treated sill plate.

If you have any questions or concerns, please feel free to contact us.

**Sincerely,**

**Bunkers and Associates, LLC**



Eric M. Bunkers, P.E.  
MN Reg. Num. 26490

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.



Eric M. Bunkers

Date: October 4, 2013 Reg. No. 26490